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Mr. Elmer S. Duncan
Acting Area Manager
Moab District Grand Resource Area
Bureau of Land Management
P. O. Box M
Moab, Utah 84532

Re: Reclamation of Upper Tailings Impoundment

Dear Mr. Duncan:

Thank you for the opportunity to meet with you and your staff on our proposed reclamation plans for the Lisbon operation yesterday morning. Bud Reaveau and I discussed the archaeological survey we have underway by Abajo Archaeology and the contents of our latest consultant report entitled "Reclamation Cover Design and Analysis of Tailings at the Lisbon Uranium Mill." As mentioned, this report is the latest in a series of reports which have been submitted to the U. S. Nuclear Regulatory Commission in order to try to gain approval for a tailings reclamation design . A copy was left with you at the meeting.

The report provides a radon cover design for both the upper and lower tailings impoundments to meet NRC's current 20 pCi/m^2s radon emission standard. However, at this stage we only plan to try to get approval from NRC for the placement of the upper tailings cover, mainly because there is still the possibility of using the lower tailings impoundment before it is finally reclaimed. Our plans for handling the borrow soils for placement of upper tailings cover were explained at the meeting using Plate I from the report: "Borrow Area Soils." This plate provides borrow depth contours, the areal extent of soils, and the soil types for the potential borrow areas within the Lisbon property boundary and of close haul distance to the tailings. It was derived from an extensive sampling and testing program conducted by Earthfax Engineering since October 1986 to determine the engineering properties of local soils.

We plan to use clay borrow material from Borrow Area No. 2 for the first foot of the upper tailings cover and silt borrow from Borrow Area No. 4 for the next 2.3 feet of cover. After archaeological and historical artifact clearance of these borrow areas from NRC, BLM, and the State we plan to remove all vegetation and the six to twelve inches of topsoil. This material will be pushed by bulldozer into windrows at the edges of the borrow areas for subsequent replacement.

The borrow soils will be hauled from borrow areas by self-loading, elevating scrapers to the upper tailings impoundment. A ripper-equipped

bulldozer will be used at the borrow sites to help break up the dry soils as needed and to assist scraper loading. Larger scrapers will be used for the silt. Motorized compactors, a grader and water wagon will be used on the tailings cover to enable it to be placed to specifications.

If the reclamation requirements of the borrow areas allow us to use close to the full soil borrow depth, approximately 6 - 7 acres will be disturbed for the clay cover from Borrow Area No. 2 and 12 - 15 acres will be disturbed for the silt cover from Borrow Area No. 4. We will not disturb any more area than is necessary to complete the project. The existing roadway through Borrow Area No. 3 provides good access for hauling clay, but we will need to disturb an additional 0.5 acre for access to the silt from Borrow Area No. 4. These disturbed areas will be held to a minimum with no trees being destroyed unnecessarily, preventing unnecessary and undue degradation of public lands, as mandated by the Federal Land Policy and Management Act and as required by the 43 CFR 3809 regulations.

Erosion control measures shall be used, such as providing drainage dips on all roads which stay open for more than one season. Roads which are used for only one season and then abandoned shall be ripped and reseeded with entrances blocked to prevent vehicle traffic.

After each phase of the project is completed the borrow areas shall be reshaped to as near their original contours as possible, with no new ponds being allowed to form. The stockpiled topsoil shall be evenly spread over the recontoured area, with no radioactive materials being used in the fill, and with embankment slopes reseeded to reduce erosion.

Any seed application will be by seed drill or broadcasted and harrowed on contour. If such seeding is unsuccessful as determined by the authorized BLM inspector, we shall repeat the seeding until a successful reseeding has occurred. After recontouring, seeding and spreading of topsoil, the area shall be watered so that wind erosion is lessened. Vegetative cover which has been removed shall be scattered to give the areas a natural appearance and help prevent soil erosion.

We shall seed each site with a seed mixture that conforms to BLM's current requirements. Please let us know what you need for seed mixture and the amounts required per acre.

It is my sincere desire to provide continued employment for the current Lisbon workforce. Your approval for us to proceed with the abovementioned plan is therefore crucial. Also, any guidance you may be able to provide on efficient reclamation techniques would be greatly appreciated, and may eliminate any potential misunderstandings. We can arrange for a site visit for you or your staff at any time. Please let me know if you would like to

If you have any questions, or need additional information, please feel free to call Mr. Reaveau at 686-2217 or myself at 686-2216 at any time.

Yours sincerely,

R. S. Pattison
Manager, Lisbon Operations

RSP:wr

cc: M. D. Freeman
B. K. Reaveau
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